

ABSTRACT OF THE DISCLOSURE

~~The invention discloses a~~ A device for hybridization reaction between a target molecule in a fluid and a probe, which ~~comprises~~ includes a microfluidic channel having comprising a first portion and a second portion following ~~said the~~ first portion; wherein ~~said the~~ first portion ~~have~~ has an irregular cross section and ~~said the~~ second portion has a probe, and a fluid driving element connected to the ends of ~~said the~~ channel with tubes, wherein ~~said the~~ fluid element can move ~~said the~~ target molecules back-and-forth for repeatedly passing through ~~said the~~ second portion.